IN THE SPECIFICATION:

Please replace paragraph [1036] with the following paragraph. The amendments to paragraph [1036] are indicated by strikethrough and underlining.

[1036] In one embodiment of the present invention, a potential function is used. More specifically, this potential function is approximated by a product of a weight function and a quadratic function, namely:

$$v_j = \mathbf{R}_j^2 \exp(-\mathbf{R}_j^2/([[\ ]]\underline{\sigma}^2))$$

where

v_j is the potential between the probe and the j^{th} data point,

$\mathbf{R}_j$ is the dissimilarity/distance between the probe and the j^{th} data point, and

$[[\ ]]\underline{\sigma}^2$ is an estimate of the noise variance associated with $\mathbf{R}$.

A plot of this potential function versus dissimilarity/distance is illustrated in FIG. 7, where a value of 5 is assumed for the noise variance associated with dissimilarity/distance, **R**. In one embodiment of the present invention, **R**, represents the Euclidean distance between the probe and the respective data point. This function requires an estimate of the noise variance of the particular measuring device used to collect the data associated with the corresponding data field 160. As would be apparent, the noise variance provides a measure of the uncertainty associated with the measurement.